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ABSTRACT

A four-month study undertaken by the Greater Newark Chamber of Commerce with the cooperation of various educational and vocational institutions and business organizations is reported. Discussed are planning and organization for career education, philosophy and roles, financing activities and business-educator relationships. Course offerings are analyzed and program duplication and outdatedness as evidenced by a job survey are explored. Performance measurement of the various programs is considered as well as the dropout problem and the several programs designed to alleviate this situation. The steps taken by Essex County College toward career education are detailed, and Project COED (Center for Occupational Education, Experimentation and Demonstration) is explained. A 37-item bibliography is included. (SC)

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Volume 1

Career Education in Newark

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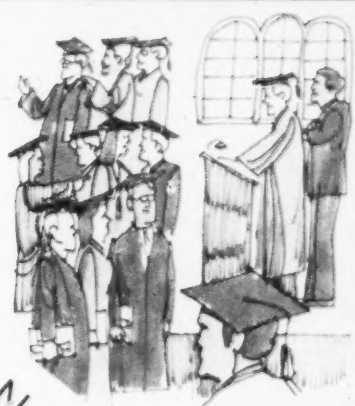
A Report of the survey of Career Education in the City of Newark, New Jersey



Greater Newark Chamber of Commerce • June 1973

CE 000 360

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CAREER EDUCATION IN NEWARK

A Report of the Survey of Career Education in the City of Newark, New Jersey

CE 000 360

Greater Newark Chamber of Commerce
Newark, New Jersey
June 1973

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INTRODUCTION

In January of 1973 a report "Career Education, a Feasibility Study of the Programs, Plans and Needs of City, County, and State Agencies Serving Newark School Students" (App. 29) was published. This report accepted by the Chamber, recommended that a deeper look be taken at the specific problem areas contained in the report. This further step was adopted by the Chamber at that time. A study team was created and has been actively gathering information for this report.

During this four month period of time, the study team had the full cooperation of the staffs of the Public Schools, the County Vocational Schools, the Multi-Skill Center, and Essex County College. This cooperation has enabled the team to obtain data, to conduct interviews, and to make visitations to each agency and location where elements of Career Education are occurring. At no time was the study team asked to alter their findings in any way by any member of the staff of these agencies. The team found enthusiastic encouragement to probe and uncover information and to express a fresh point of view from the staffs of the four educational institutes. We are grateful that this spirit of cooperation existed and trust that our recommendations reflect the same spirit to these agencies.

Career Education is an educator's term which has no single accepted definition. The January Chamber Report contained a working definition:

> Career Education for Newark requires that school aged students be involved in educational programs of occupational awareness, exposure, and preparation so that each graduate may have a marketable skill and an increase in his options ranging from technician to professional rather than limited options offered by traditional vocational education which focus toward a one-way given goal. This requires active participation in the process by the educational, business, gov rnment, and labor sectors of Newark. The success of a program in Newark can be measured by performance. The continued success depends upon a plan to establish an on-going evaluation of the program.

The definition suggests that the scope of our inquiry would go beyond the four educational institutes which it did. It identifies three primary groups of actors involved in Career Education - the first being the educators, the second employers, and the third the clients or students. This simplistic overview of the actors involved enables a clear understanding of the broad scope of this report.

Educators are today faced with the tasks of educating more people than ever before and of adapting the educational plant to fulfill realistic educational outcomes. As an example, studies today show that a baccalureate degree may be required by only 20% of the high school graduates. This, of course, suggests that educators need to gear-up to the change which is upon us and to produce graduates who have learned the skill they will need to live by. This is perhaps one of the real reasons why Career Education has become the most significant concept in education today.

Employers, be they private or public are faced with a host of employee problems today. On the one hand employers want properly educated persons who can fit into their function in this growingly complex society while on the other hand they recognize that many jobs today need to be changed for they are fraught with job enrichment needs which are aggravated by the mechanization of nearly every task imaginable. Getting people to fit, to be able to do the job, and to be content, and therefore highly productive employees is the goal that accounts for business' prime advocacy of the concept of Career Education. For business people the concept is realistic, and is the right set of reasons for business to become involved in the process.

Students wish to prepare themselves for life, citizenship, marriage, a career, etc. Perhaps as never before students are more highly educated and need the practicability of career experience for career decisions. Statistics show that over 30% of persons going to college never complete their degree work. Job related statistics show that workers experience an average of 4 - 6 job changes in a lifetime of work. Students are not unaware of the value of career knowledge and experience and are today demanding that their public schooling include information and requirements which will enable them to make intelligent decisions about their careers.

This brief summation of the self interest of educators, employers, and students regarding the worth of Career Education offers dramatic reasons for the scope of the study.

We found that the Chamber study occurred coincident with the beginning thrusts of the N.J. State Department of Education Career Education Plan. Many of our findings made independently are included in the State plan. This has been fortuitous since it means that Newark's plans can be made in concert with the State experience gained in several pilot Counties.

The study team found itself dealing in "presents" and "futures." How could some steps be taken in the short range and what steps could be taken now which would have later payoff?

The rationale adopted in the study allowed short-range recommendations which maximized the current existing system. Making comprehensive long range plans is also recommended in this study. In both phases the team sees the Chamber, and the other non-school agencies, - labor, government, community, etc. being more directly involved in the process of Career Education.

This process is an on-going one and is also a recommendation of the study team. It is assumed that this study will be reviewed by the agencies and those recommendations adopted will be implemented with regular and continuing business assistance.

SECTION I

PLANNING AND ORGANIZATION FOR CAREER EDUCATION

The task force recognizes that the lack of overall planning inhibits a maximum utilization of career education facilities currently available to Newark school students. It further feels that the overriding need at this time is to see that an overall plan be developed and implemented.

The remaining sections of this study deal in detail with the needs of Newark. This section will lay out planning and organizational recommendations.

Planning to some people means delay, little execution, and in general a waste of time. What those persons have seen has been too much or too little planning. Planning fundamentally considers two factors: scope and timing. Planning allows for the laying out of a consistent path whose beginning, end, and detour are understood.

As to the scope of a plan for career education for Newark we are referring to students and dropouts of school age in grades K-12. While career education encompasses any activity involved in learning life's work, our report focuses on this age group. The scope is all inclusive. It ranges from places where one learns to places where one works. It includes the people and the government of the city since they are a real part of the employment needs of the city. It includes organizations such as labor unions since they too are involved in career education.

It includes business and industry since they are the principal employers. The scope then is all inclusive and, therefore, planning also becomes all inclusive.

The second phase of planning deals with time. This study senses and conveys a sense of urgency. The unemployment rate in the city is the highest in the state. Teenage unemployment figures are unavailable but reckoned to be in the 25 to 35% range. This is a problem now and unless something is done it can only worsen.

Our first finding suggests that a short-range plan be established and be made effective starting in September 1973 and extending through the 1973-74 fiscal year. The objective of this is to utilize existing facilities and resources at maximum. Monies available to the agencies have already been committed to school programs. What is needed is a plan to increase the amount and scope of career education that can occur at this time. Other sections of this report are specific about this maximum utilization of facilities.

Coincident with the preparation and implementation of this plan a long-range plan should be developed. This plan would be formulated to be effective in the 2-5 year period. Planning, program, and construction factors require that lead time and facilities be available for such a plan. While the short-range

plan replies to the question what can be done, the long-range plan needs to also consider what needs to be done.

There are specific things which will occur at the schools during this year as a result of past planning. We know of specific plans that will provide 800 high school student career training positions this coming spring. At the high school level, this will amount to a 50% increase of persons involved in career education programs. Other school centered inter-agency plans will raise this to over 1,000 pupils. Further details are included in the section entitled "program duplication."

We feel that there are several other areas that can be sources for additional high school career education to occur. Plans should be established to see that vacant seats in high school and vocational career education programs are occupied. This occupancy can occur with no additional operating expense to the agencies.

In the area of cooperative education we feel that specific plans should be established with the business community to increase the opportunities for high school aged students to work with local businesses and industries. A number goal arrived at with school personnel should be established so that maximum use is made of business-school career education potential.

We would also feel that both unions and government be called upon to open up positions for high school aged persons in their various employment roles. Their aggregate hiring and apprentice programs might represent as much as 35% of the jobs in the Greater Newark area.

These recommendations require an organization to deal with the multi-agency nature of career education. This requirement will allow a reorganization of effort to occur where all agencies will be aware of and be involved in what others are doing, where problems are occurring, etc.

Coincident with the feasibility report given the Chamber in January, the Essex County Coordinator of Career Education started implementing a state plan for a County Coordinating Council. This move has started the organizational apparatus which is necessary for short and long range planning to occur. The plan is one which has been field tested and it is nearly identical in function to the Chamber plan attached.

During April and May a working committee of agency representatives met to review the County organizational plans. They reviewed the Chamber organizational proposal also based upon an existing model. From these two models, the committee has determined that the best organization that will do the most effective job for Newark is the newly created County Coordina-

ting Council. This working committee was representative of all agencies and completed its work in May.

During April and May this same working committee set the bench mark for career education in Newark. This group prepared statements of goals for career education for their respective agencies along with statements of roles that they see other agencies playing in this effort. Thus, as an example the Newark Public Schools prepared a short set of goals for career education to occur within their agency. They also submitted a set of roles which they see required by the other agencies; business-industry, labor, government, etc. These statements of career education philosophy have been synthesized into an overall statement of goals for career education for Newark. It will be toward this set of goals that the planning efforts will be directed. The other source of goals will be those included as a part of this report.

At this writing, the study team is aware of the Title III funding secured by Essex County College for higher educational career plans and programs. We believe that the offer by the ECC to become involved in the work of this committee as well as to involve the committee in its work will provide tremendous resource not only to this study, but for the short and long term stages of the career education plan.

The quantity and quality of career education can be expanded in Newark. It requires the continued support of each agency. It goes without saying that the active cooperation in this study of all agencies and the whole hearted support of the public school and Chamber persons is but a beginning to reducing the problem of unemployment and underemployment in Newark. A continuing role and action are required by all agencies.

Who will be responsible for creating a short term plan? The business community is familiar with a workable device which calls for the assignment of responsibility and objectives, and the measurement of performance. This methodology cuts across physical, organizational, and other barriers which might impede getting the job done. Most times this methodology works well for it is clear, easily understood, and a reasonable approach to the development of a product or service.

The product in this case is a set of specific goals, each of which focus upon improving the quality and quantity of career education. Formulation of these goals is a function of the agency involved. Yet the agency will have to reckon with the statements of other agencies as to their roles. The review of goals will be done by the County Coordinator. The Council is the group which is able to indicate agreement or disagreement with a plan on the basis of its need, workability, and benefit from a multi-agency point of view.

Agencies will need to carefully consider their acceptance of these goals which may differ from their own conceptions. This consideration is most important for it will represent a way to alter a course of direction without capsizing the ship.

Our experience indicates that the residual inertia to change will be the severest hurdle to cross in this goal process. Yet the change must occur in order to accomplish in school what expensive and wasteful remediation will otherwise be called upon to do. Newark needs change and agencies must react to these needs.

Who will be responsible for seeing that the plans are implemented? We recognize that self measurement needs to be augmented by impartial observation. Businesses in the United States are utilizing a device where "operating reviews" are made of various phases of the business. These reviews, made by impartial but knowledgeable persons, are designed to see that the businesses are efficiently and effectively run. Their use is an impersonal one and has been found to be both needed and beneficial.

We believe a person such as the "Coordinator of Career Education" is the proper party to see that plans are implemented, for that position should be organized by one with knowledge and impartiality.

This role, delegated to that person, would not displace any agency personnel or responsibility. The Coordinator represents an agreed upon person who would be responsible to see that plans which have been made are implemented. The power of this educator flows directly from the Advisory Board.

The Coordinator is not an enforcer but rather an individual whose knowledge and skill will be utilized by seeing that implementation does indeed occur.

Who will be responsible for the creation of a long term plan? Each agency will be responsible for creating a long term plan. This creation by the agency should be reviewed on an on-going basis by the County Council and by the Coordinator of Career Education.

A review of the plan by the Coordinating Council will insure that the program is one which will solve career education problems, that it is the needed plan, that the plan will work, and that in working it will be beneficial to Newark.

How well will this plan work in Newark? Newark, New Jersey is not unlike many other Eastern urban centers. To comment on the factors which will inhibit or slow down the planned changes toward Career Education is an academic exercise unattempted here. This is not to say that these factors are

unimportant. It is to say that all of the urban factors must be considered as the short and long range plans unfold.

Newark has one additional factor which should be apparent to education - visibility of school plant dedicated to career education. Our visits to other locations where Career Education programs have been recently instituted, in most instances, found newly constructed school facilities. The existence of a Dade County Career Education complex, a "Skyline" in Dallas, a new Lower Camden County Vocational High School, a new Wilmington, Delaware Career Center, etc., are symbolic means of showing change.

There is no new school building in Newark which has been built for the exclusive use of Career Education. While there are two new buildings going up - the County Tech Career Center and the new addition to the Skill Center - these have not caught on in the public's mind as a new facility for Newark for Career Education.

Attention must be given to the problem of making visible and attractive the Career Education plans and changes that will occur in Newark.

Responsibility for this publicity should be assigned by the Coordinator and Coordinating Council. A highly visible regular community information program should be started at this time

with direct help from the Chamber of Commerce.

What are the recommendations of the study team?

1. A short term plan should be prepared by June 1973 and implemented during the 1973-74 school year.

2. A long-range plan should be prepared for the 2-5 year period hence. This plan should be prepared in time that budget and funding requests may be made on an ordered basis. The first stages of this plan should be prepared this fall.

3. Cooperative education students goals should be established by the school-business community. This should occur prior to September 1, 1973.

4. Government should establish the number of goals with school personnel for cooperative work with high school students.

5. Unions should establish goals for cooperative and graduate openings in union shop areas under their control. This should be done prior to September 1, 1973.

6. Non-profit agencies and public school personnel should examine and lay out the career training and experience possibilities for Newark students. A comprehensive cooperative educational plan should be developed with this sector to equal in numbers the students in vocational and co-op educational projects.

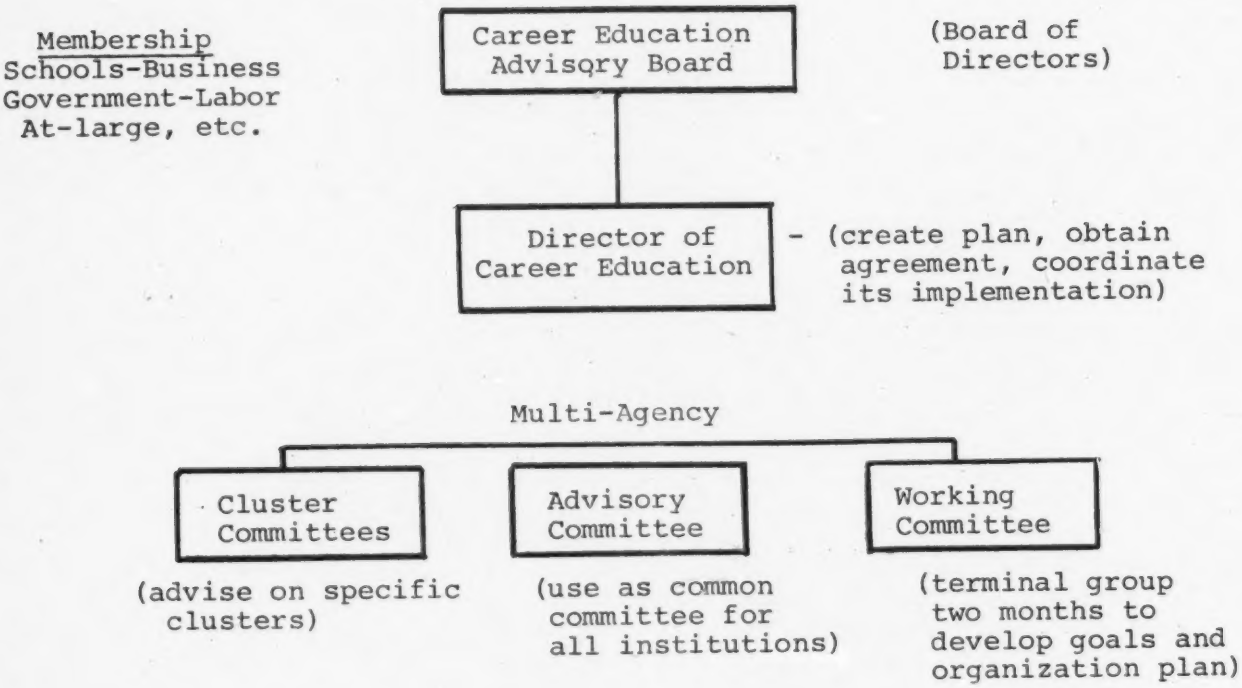
7. Insure executive level support for the goals of career education. This step may require the creation of an ad hoc group whose function would be to serve in this capacity.

8. Provide publicity for the short term and long term Career Education plans and programs.

9. The Chamber of Commerce should continue to support the work of the Coordinator & Coordinating Council. During the June 73-74 year the Chamber should designate a person working for the Chamber whose time would be made available for work in the Career Education project.

10. The Chamber should also designate a person working for the Chamber whose time would be made available for the development of long range plans.

11. Since the initial writing of the report, the study team has seen and examined the state plan for the County Coordinating Council. Since the state plan is nearly identical to the plan proposed in this report, we recommend that the Chamber back the County Council, for it would serve no purpose to have nearly identical organizations working separately toward the same goal. For more information on the functions of the County Coordinating Council see appendix 26.



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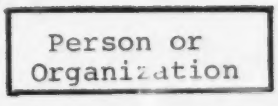

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SECTION II

A. STATEMENT OF PHILOSOPHY OF CAREER EDUCATION FOR NEWARK

B. COMBINED STATEMENTS OF CAREER EDUCATION ROLES FOR:

- Newark Public Schools
- Essex County Vocational and Technical Schools
- Essex County College
- Project COED
- Government
- Labor
- Non profit agencies
- Community

STATEMENT OF PHILOSOPHY OF CAREER EDUCATION FOR NEWARK

Career Education should provide all pupils K-12 with exposure to classroom activities and materials that would relate and correlate curricular experiences to the "world of work". Final practical outcome of the program should be the development of attitudes and habits, as well as the acquisition of basic marketable skills that would make the student an employable, useful, and productive citizen.

Career Education should expand the variety of options open to our young people, and although it is not synonymous with vocational education, the two are closely linked. Career education can serve as the vehicle to bring vocational education to the vast majority of the students.

Business recognizes the joint concern of business, government, labor, and community for the urban problems facing Newark. A city is not healthy where a high percentage of young people are unemployed or under-employed.

Business no longer believes that its concerns are to be in the "private sector" while others operate in the "public sector". In short, business recognizes its self-interest and its social responsibility to this problem and sees itself operating to provide the leadership to face-up to this problem and responsibility.

Business believes that the career education moves being made across the country offer the best method for the solution to the problem of unemployment and under-employment for Newark. Maximizing the existing education systems for this short range task and laying in a long range plan which will systemize the attack are the desirable steps to be taken at this time.

Business sees its role as leading and participating in the plans to make these moves operative. This means that leadership and other resources in the field of business expertise and interest will be contributed to assist in the solution to this problem. This also contemplates the establishment of a consortium of business, government, labor, education, and community agencies to oversee the direction and effectiveness of the program.

COMBINED STATEMENTS OF CAREER EDUCATION ROLES

Role of the Newark Public Schools

This agency's prime responsibility is education. The schools must teach: reading, computations, citizenship, as well as the importance of good attendance and tardiness records - in general terms, the work ethic.

The schools must develop a comprehensive career education plan for grades K-12. At the elementary grades, this program should

consist of career awareness and elementary exploration. At the middle school the program should consist of more sophisticated exploration as well as introduction to skills. At the high school level the program should be geared to the development of specific job and educational skills. The program would then provide all students with entry level job skills in the field of their choice and the ability to continue their education at whatever may be their chosen institution.

The schools, together with the other agencies providing career education should form a "consortium" type organization to become proponents for funding proposals or requests to the government or non-profit foundations.

The schools should establish a public relations program for career education.

The schools should submit a yearly report of progress in career education to the Chamber of Commerce and the other career education agencies.

Finally, the schools should provide active participation on the County Coordinating Council.

Role of the County Vocational and Technical Schools

As with the public schools, this agency's prime responsibility

is education. the schools must teach: reading, computations, citizenship, as well as the importance of good attendance and tardiness records, in general terms, the work ethic.

The county schools must provide all students with entry level job skills in the field of their choice and the ability to continue their education at whatever may be their chosen institution.

The county schools, together with the other agencies providing career education should form a "consortium" type organization to become proponents for funding proposals or requests to the government or non-profit foundations.

They should establish a public relations program for career education.

The county schools should provide more shared time slots for the Newark Public Schools so that more students may receive valuable skill training.

The county schools should strive to eliminate the duplication of programs and facilities existing within their system.

The county schools should re-evaluate their curriculum offerings for updating purposes.

They should submit a yearly report of progress in career education to the Chamber of Commerce and the other career education agencies.

Finally, the county schools should provide active participation on the County Coordinating Council.

Role of Essex County College

The College should provide active backing of funding proposals prepared by the other agencies providing career education.

The College should cooperate with these other agencies through programs such as the "mini-courses" offered at the College so that more students may be exposed to the college environment.

The College should consider a centralized computer bank to be utilized for job survey needs for the Newark area.

The College should submit a yearly report of progress in career education to the Chamber as well as to the career education agencies, and provide active participation on the County Coordinating Council.

The College has committed itself to the following goals:

Assessment of student and service population characteristics and

needs in terms of program implication in relation to institutional resources and manpower data.

Assessment of community attitudes toward ECC in which potential recipients of ECC services might want new or different services rendered.

Provision of long or short range training or education, for upgrading and skill development, ideally for credit, including a remedial component, to local employers.

Support of internal staff development efforts of local employers jointly with their training staff.

Encouragement of cooperative education opportunities within employer's organization for ECC students to earn credit as part of ECC's Career Development efforts. These would either be paid or unpaid activities toward extending the instructional resources of the college into the local world of work environment.

Provision of a one or two semester career orientation and exploration course for credit for entering ECC students in order to provide them with a better assessment of career opportunities and a chance to assess personal desires and characteristics more realistically against aspiration and the potential job market.

Provision of career opportunity information to high school students.

Efforts toward guaranteed placement.

Role of Project COED

This agency should share the goals of the other educational institutions. That is, it must teach: reading, computations, citizenship as well as the work ethic.

Project COED must provide all students with entry level job skills in the field of their choice as well as the ability to continue their education if they so choose.

Together with the schools, form a "consortium" type organization to become proponents for funding proposals or requests to the government or non-profit foundations.

Project COED should establish a public relations program for career education.

Project COED should submit a yearly report of progress in career education to the Chamber of Commerce and the other career education agencies, and finally, this agency should provide active participation on the County Coordinating Council.

Role of Government

Government should establish a policy of active support for the career education program for Newark.

Government should actively support funding proposals prepared by the career education agencies.

As one of the largest employers in the city, government should cooperate with Newark schools by providing part-time jobs for cooperative education, work-study students. It is estimated that 600 of these students are presently employed by the private sector. The government with its vast resources could probably match this figure.

The government should act as a clearinghouse for all governmental cooperative education jobs.

The government should establish a means to assure an equitable distribution of federal monies between government and education.

Government should submit a yearly report of progress in career education to the Chamber and the career education agencies.

Government should actively participate on the County Coordinating Council.

Role of Business

A short range goal for business would be to appoint an individual to compile a guide or a directory of all resources available that could be utilized by the career education agencies. These resources would be items such as: guest speakers, field visits, films, etc.

A long range goal would be to appoint an individual designated to work full time with career education agencies, to assist in planning and to coordinate their requests to business.

Business should provide part time jobs for students involved in cooperative education programs. A 10% increase or 60 more positions would be a satisfactory first step.

Business should provide active support of funding proposals prepared by career education agencies.

Business should provide possible part time or summer employment for teachers and counselors so that they may be able to speak from experience as to what is required and expected of employees as service and/or production employees.

Business should provide for the use of modern equipment, either in school or on site, to demonstrate on a realistic and relevant basis, its function in the business world.

Business should establish identification of short and long range manpower needs.

Finally, business should actively participate in the County Coordinating Council.

Role of Labor

Labor should provide part time jobs for students involved in cooperative education programs.

Labor should accept those graduates possessing the required entry level skills for full time jobs.

Labor should submit a yearly report of progress in career education to the Chamber of Commerce and to the career education agencies.

Finally, labor should provide active participation on the County Coordinating Council.

Role of Non-Profit Agencies

Non-profit agencies should provide non paying, part time, community service type work experience, for those students who may be interested in serving the community as well as augmenting their exposure to various careers.

These organizations should submit a yearly report of progress in career education to the Chamber of Commerce and the other career education agencies.

Role of the Community

The community-parents, should acquire and disseminate a thorough understanding of the meaning of career education.

This group should support the efforts of all the agencies involved in career education and should reinforce at home, the programs that the students are exposed to in school.

The community should actively support funding proposals prepared by the agencies involved in career education.

The community should provide active participation on the County Coordinating Council.

SECTION III

FINANCING ACTIVITIES:
NEWARK PUBLIC SCHOOLS
ESSEX COUNTY VOCATIONAL-TECHNICAL SCHOOLS

Funding is naturally an important part of an educational system. With it in mind, the study team gathered and analyzed data on the funding structure of vocational and career education courses in Newark schools. All these programs are now federally funded or were at some time in the past. The money for them is appropriated by Congress under the Vocational Education Act Amendments of 1968.

Each year the State Department of Education solicits applications from local school boards for funding under the Vocational Education Act. These requests are reviewed for accuracy and completeness at the county level and are then sent to Trenton for consideration for funding. Last year (for the 72-73 school year) the State received requests for $55 million in funds. The State was granted $10 million from Washington. This $10 million was then allocated among the various school districts. Newark's Board of Education had requested approximately $500,000. They received $223,568 or 2.2% of the total monies given to the State (Newark has 5% of the State's students).

In addition to this $223,000, Newark also received $154,000 to fund the Career Education Project at Weequahic High School and Peshine Avenue School. This money came from the governor's discretionary fund for career education projects. That fund also comes under the Vocational Education Act but is not included in the $10 million for the State.

The Newark schools are asking for $1.1 million for the 73-74 school year. Approximately $400,000 of that is for continuation and expansion of the career education project. If all money is granted, the project will include Dayton Street School and Malcolm X Shabazz High School in addition to Weequahic and Peshine Avenue. If the $400,000 is not obtained, a promising program will be dropped for lack of funds.

Federal money is seed money. That is, it is meant to start new programs in a school district; the local school district is supposed to eventually pick up the full cost of the program if it considers it worth maintaining. To this end, most programs are funded 100% the first year, 50% the second year, and 25% the third year. After the third year funding is seldom continued.

Such a funding procedure should force the local board to evaluate all its programs and keep only those that are both needed and effective. This implies eliminating old programs which duplicate efforts of the new programs or whose usefulness has been outgrown. It also means cutting off new programs that don't work. Unfortunately the Newark Board has no system for such evaluation. The review process is largely hit or miss. This means that programs, both old and new, are kept on beyond their usefulness.

One case where the process worked is in the Newark junior high schools. These schools, with the help of federal funding, instituted an industrial arts program called Industrial Arts

Curriculum Project (IACP). IACP is now in all five junior highs; it has replaced the old industrial arts courses. The Newark Board of Education saw its advantages and picked up the cost of the program. This is a good example of review and replacement. Such a process is what was intended to come as a result of seed money. A new program is instituted, evaluated, found to be effective, and it is put into all schools and funded locally, or it is found to be ineffective and is dropped.

Unfortunately, such a process is not institutionalized in Newark. Many programs are dropped when federal funding runs out because of lack of funds. These may or may not be worth funding by the Board. The point is that no one knows for sure; there is usually little objective data on which to base the decision. In some cases it would be possible to find the money if outdated programs where discontinued. For greatest educational effectiveness, some system of evaluation must be set up.

Another problem in this area is in getting federally funded programs off the ground. Newark has experienced some extended delays in getting programs under way once they have received notice of funding. One project the study team observed was funded effective January 1, 1972. No director was hired until June 1972. This meant a loss of six months planning time and,

consequently, a reduction in the effectiveness of the project. This was purely a local delay.

A similar delay took place later in the project in the use of the monies accrued during the original six month delay. Proposals for use of this money lay dormant for at least a month or two while no action was taken. This lack of action led to a frantic rush to get necessary local and federal approvals for the mini-projects in the Spring. The final result was that the four programs all started late and some allocated funds will be returned as unused.

Such delays adversely affect planning and implementation of new and promising programs. The study team sees two partial remedies for avoidable delays. The first is to work for Board approval simultaneously with federal approval. This would minimize harm done when the Board has to table measures. It would also mean that programs could be implemented just as soon as federal approval is received.

The second partial remedy relies on individual project directors. Once they know there is accrual money to be used, they should act immediately to make plans to use it. Any money not used goes back to Washington. Newark can't afford to lose a cent of any money it can get. A regular report of this possibility should be required 6 months before a project expires and again at the end date of any funded program.

The Board at present has no coordination with the Essex County Vocational and Technical Schools. The two systems, however, vie for the same funds in the area of vocational education.

The County schools receive about $123,000 from the federal government for vocational education. Since eighty per cent of their money goes to Newark students, this raises Newark's share of the state money to approximately 3.2%, still short of the 5% it deserves on the basis of student numbers.

The County and local Board need to coordinate their funding requests and lobby for more funds for Newark. They should attempt to eliminate duplicate courses which would in turn, cut costs. They should lobby at the state level to get their fair share of funds allocated to the state.

This section of the report has concentrated mostly on federal funding in the schools. Both systems finance vocational programs with local and, in the case of the County, State funds. These funds are not broken down so that we can see how much money goes to each program. However, local money constitutes the bulk of the money the schools operate on. This money has been pretty much unchanging. For these two reasons we have said little about it.

To summarize what we have said, the study team offers the following list of recommendations. First, the Board of Education and the County Board should develop a system of evaluation for federal programs. This should include evaluation of all vocational programs periodically. Those programs which have outlived their usefulness should be dropped. Good programs should have continued Board funding.

Secondly, the Board of Education should streamline its procedure for obtaining approval and implementing new programs.

Finally, the city schools together with the other career education agencies should form a "consortium" type organization and become proponents of funding proposals or requests to the federal government as well as non profit foundations.

These three improvements would enhance Newark's vocational program and lay a good basis for the implementation of career education.

SECTION IV

BUSINESS-EDUCATOR RELATIONSHIPS:
NEWARK PUBLIC SCHOOLS
ESSEX COUNTY VOCATIONAL-TECHNICAL SCHOOLS

NEWARK PUBLIC SCHOOLS

The base for exploring Business - Educator Relationships in Newark's Public Schools was limited to the "Outline of Federal Programs for Education" FY 1972-73. While time did not allow for an in-depth review of all programs listed, those programs that related to "Career Education" were selected for review. It must be stated at this time that a primary requirement for funding of every program proposal requires the identification of any advisory board membership. In some cases this board was composed totally of educators, in others the board included community and business-industry representatives.

The frequency of meetings ranged from none in the past year to 2 or 4 per year. The exception to the formal procedure in scheduling meetings is a procedure followed by a Coordinator of the Introduction to Vocations Program at one of the Newark Schools. Although this Coordinator has not formalized her resources in a structured manner called an advisory board, she has established ongoing relationships with ninety businesses (See Appendix 1) and associations on a personal basis. This intensity of involvement in interweaving her activities with outside resources is a very commendable effort.

The following is a listing of selected programs and the relationship of business to education:

· Legislation: P.L. 90-248 Social Security Act 1967

Program: Work Incentive Program (WIN)

Administrator: Mr. Carmen J. Attanasio

Business Representatives: Mary Miqueli - N.J. Bell Telephone

Neil Clemmons - N.J. State Employment Service

Community Representatives: Patricia Evans, Jerry Johnson

. Legislation: P.L. 90-576 Vocational Education Amendments of 1968

Program: Career Education

Administrator: Mr. William McGuinn

Business Representatives: Priscilla Ryan - Bambergers

Donald Fuller - Valley Fair

Leo Rogers - Howard Savings

David Frazier - Clinton Avenue Merchants Association

Mary Miqueli - N.J. Bell Telephone

Dick Harclerode - N.J. Bell Telephone

Maurice Veneri - N.J. Industrial Union

Earl Williams - N.J. Industrial Union

Frequency of meetings: 4 times a year

· Legislation: P.L. 90756 Vocational Amendments of 1968

Program: Distributive Education

Administrator: Thomas Chickowski - Barringer

Business Representatives: Priscilla Ryan - Bambergers

Richard Anthony - Washtown

Frequency of meetings: 2 per year

· Legislation: P.L. 90-576 Vocational Education Amendments of 1968

Program: Employment Orientation

Administrator: Nadine Porter, Central High School

Business Representative: None (2 years ago - Bill Wilson, N.J. Bell Telephone)

Administrator: Dominick DeCicco - J.F.K. School

Business Representatives: Jim Varga - Western Electric Company

Art Bierman - Occupational Center

Rocco Miola - Occupational Center

Frequency of meetings: 1-2 per year

· Legislation: P.L. 90-576 Vocational Amendments of 1968

Program: Cooperative Industrial Education

Administrator: Louis Altieri - Montgomery School

Business Representatives: Abe Freeman - Garry's Restaurant

Mr. Weiner - Mart Furniture Gallery

Larry Polliti - H & H Screw Company

Community Representatives: Mr. West, Gloria Hall

Administrator: Margaret Coppola - East Side High School

Business Representatives: Edward Horan - Excel Gear Company

Franklin Steel

Ironbound Manufacturers' Association

Frequency of meetings: Monthly

· Legislation: P.L. 90-576 Vocational Education Amendments of 1968

Program: Introduction to Vocations

Administrator: John Maughan - Broadway Junior High School

Business Representative: None

Administrator: Aurilla Gursky - Webster Junior High School

Business Representatives: None

In addition to the business representation on the programs previously listed, a city-wide advisory committee was formed on January 24, 1973, to "review and assess career education programs and also to suggest new programs that will be beneficial to Newark students." The makeup of this advisory committee is described in Appendix 2.

ESSEX COUNTY VOCATIONAL-TECHNICAL SCHOOLS

The formalization of Education-Business relationship in the County Schools is almost totally absent. Effective relationships apparently do exist - not by design - between classroom teachers and the potential employers. No pattern for promulgating this relationship was discernible.

Because of its very nature of informality, statistics regarding eventual turnover and permanency of employment was valid for three months. The job of statistical follow-up on placement is left to one person for all of the five county schools, obviously an impossible task.

Nonetheless, the "casual" teacher-employer relationship although a happenstance, could possibly be formalized since it appears as a basic strength of the Essex County Vocational system.

A further commentary of the nature of Education-Business relationship is that we could discover no deliberate attempt to assess the direction of future occupations and skills of the area. Business people were not challenged to identify trends of the future nor were the educators sensitized in any systematic way to the changing career functions of the urban areas. For example, while it was accepted that traditional skills had to find placement in more distant areas than formerly, there seemed to be no recognition that manufacturing was no longer a prime employer in the city. Similarly the careers in Finance, Transportation, and Government seemed not to be visualized as new challenges for vocational education.

The study team makes the following recommendations in hopes of improving the education-business relationship:

. The Chamber of Commerce should appoint a fulltime individual to work with program coordinators to organize arrangements such as: field trips, guest speakers, etc., required to make career education relevant and meaningful.

Until this long-range goal is met, directories such as the Chamber's Newark Essex County Directory of Business could be distributed to the program coordinators for the development of business contacts.

- The Chamber should develop a directory of resources available to educators; resources such as: field trips, speakers, jobs.

- The Business Community should become aware of school needs, refer these to the Chamber so that manpower may be appointed to meet these needs.

SECTION V

CAREER EDUCATION OFFERINGS:
NEWARK PUBLIC SCHOOLS
ESSEX COUNTY VOCATIONAL TECHNICAL SCHOOLS

NEWARK PUBLIC SCHOOLS

The Newark Public School System divides its "career education" offerings into Federally Assisted programs and Regular Board of Education programs.

FEDERALLY ASSISTED PROGRAMS

CAREER EDUCATION:

This program is designed to introduce children from Kindergarten through 12th grade to the world of work and prepare them for a place in it. The basic philosophy behind career education at the elementary level is to inject information about careers into all subject areas. On the secondary level occupational clusters will be identified and the students will explore these careers through classroom instruction, field observation, and work experience where possible.

This program is offered at Peshine Avenue Elementary School where it involves 360 students and a Job Placement Component at Weequahic High School involving 150 students, mainly seniors.

DISTRIBUTIVE EDUCATION:

This program studies all activities involved in moving goods and services from manufacturers or producers to the consumer. It is the study of concepts of merchandising, marketing, and management. The overall purpose of the program is to prepare students for gainful employment and for advancement in a distributive occupation. The program offers preliminary training

to juniors and schooling with work experience for seniors. It is offered in four senior high schools with a total student enrollment of 284.

EMPLOYMENT ORIENTATION:

This provides a realistic setting in order to narrow the gap between the school world and world of work. The purpose of the program is to train students for gainful employment in the areas of: Hotel-Motel occupations, assembly line operations, clothing occupations, chemical and laboratory work, packaging and shipping, simple business machines operations, and business office occupations. The program is offered at four schools (three of these are special schools) and involves 475 students.

EARLY CHILD DEVELOPMENT:

This prepares students for a career in the area of child care. Students gain an understanding of the growth and development of children. Students participate in the operation of the Childhood Development Laboratory at Barringer High School. In their senior year, students spend the afternoon at work sites for on-the-job training. The program is offered at one senior high school and involves 48 students.

WORK EXPERIENCE CAREER EXPLORATION PROGRAM:

This is aimed specifically at helping dropout prone youth to become reoriented and motivated toward education and begin preparation for the world of work. Students receive work experi-

ence on jobs. The program is offered at one junior high school and involves 24 participants.

COOPERATIVE INDUSTRIAL EDUCATION:

This program is organized through the cooperation of the educational institution and industrial or business establishments. Students spend part of their day in school and part of their day in actual employment. Students are trained for various types of employment depending on their interests and skills. Some of these programs are: Machine Shop, Tool and Die Making, Upholstery, Auto Mechanics, Food Services, and Graphic Arts. This program is offered at six schools (two of these are special schools) and involves 245 students.

HOMEMAKING AND CONSUMER EDUCATION:

This program is intended to prepare the student to be an intelligent consumer. Much of the study is done in the community. Community people who are specialists in a respective field are utilized to make the consumer education experience functional. The program is offered at all eight high schools and involves 80 students.

HEALTH OCCUPATIONS:

This is intensive orientation to basic nursing as it relates to the structure and function of the hospital. The students begin "chemical experience" in the hospital in assignments as nurses

aides, so that the students will be equipped with the basic skills necessary to compete in the job market. The program is offered at one (special) school and involves 15 students.

INTRODUCTION TO VOCATIONS:

The purpose of this program is to acquaint the student with basic information regarding employment such as finding and getting work, keeping a job, and succeeding at work. The program is offered at four schools (two are special schools) and involves 405 students.

HOME ECONOMICS COOPERATIVE:

This program is designed to prepare students to acquire the knowledge, understanding, and experience which will assist them in becoming gainfully employed citizens. Students receive on-the-job training as well as academic and trade subjects. Equal time is spent on the job and in school. Students are employed in areas such as: sewing machine operators, waitresses, counter help, food handlers, cook's helpers, teacher aides, and file clerks. The program is offered at three schools (one of these is special) and involves approximately 65 students.

The programs described above are all in operation in the Newark Public Schools. While this study was in progress, the Career Education Program at Peshine-Weequahic was in the process of expanding its offerings to include the following three programs:

INTENSIVE OCCUPATIONAL PREPARATION:

Eight intensified skill training courses will be offered after school at two of the County Vocational Schools. Students will be trained in two areas of their choice. This will involve a total of 90 students who have shown a lack of interest or are uncertain about attending college and who are in need of some skill. The student will receive a total of 43 hours of skill training. Although they will not be fully skilled, it is hoped that they will have acquired an idea of a career interest.

INTENSIVE EDUCATIONAL PREPARATION:

After normal school hours, Seniors uncertain about college will attend two, four week technical and academic courses at Essex County College so that they may decide if they want to pursue a college education. This will involve a total of 80 students. For more details about this program see appendix 3.

PROGRAM FOR INTEREST EXPLORATION:

After normal school hours, students will be exposed to careers via media equipment. Students will tape careers, write scripts, etc. This program will involve 80 students from Peshine elementary school.

PROJECT COED:

The New Jersey Department of Education, Division of Vocational Education in cooperation with the Newark Board of Education will implement the Center for Occupational Education/Experi-

mentation and Demonstration (Project COED) as soon as the new facilities are completed. (Estimated completion March 1974). Project COED will involve 800 students from the Newark Schools and will provide occupational training on a half day basis. Students will graduate from their home high schools. A more detailed report on Project COED will appear in Section X of the report.

WORLD OF FINANCE & WORLD OF TRANSPORTATION

The Newark Board of Education is also at present studying the feasibility of adding to its curriculum two new programs entitled: The World of Finance and The World of Transportation.

BOARD FUNDED PROGRAMS

The regular Newark Board of Education "career education" type offerings fall under the Division of Industrial Arts and Division of Home Economics.

By state law, all students at one time or another must have some exposure to Industrial, Practical Arts, and Home Economics curricula. The study team regrets not being able to provide accurate, up-to-date descriptions of many programs. Unfortunately, in many cases the information was not available or was in the process of being revised. The above is true for both the public schools as well as the county vocational schools.

The Industrial Arts philosophy is based on education through exploration, experimentation, and experiential activity. The program must be open to all students so they may gain information for intelligent consumerism, cultural and recreational techniques, and saleable vocational skills.

In the elementary grades the aims of Industrial Arts are to introduce the student to the shop environment, shop procedures and safety, and to develop in the student understanding, knowledge, and individual latent ability in industrial arts through the making of simple and interesting projects.

In the junior high schools, the Industrial Arts curriculum differs from that offered in the elementary schools and in the senior high schools. It is not the typical "shop" curriculum. The students are exposed to the world of industry through construction and manufacturing. The first year's course, "The World of Construction" is the study of man's managed-personnel-production system which produces constructed projects on a site. The second year's course, "The World of Manufactuing", is a study of man's managed-personnel-production system which produces society's manufactured products in a plant. It is through these two broad systems, construction and manufacture, that man shapes and reshapes his environment.

Through this program, students learn how man plans, organizes,

and controls materials, tools, techniques, and people to produce such goods as buildings, bridges, highways, dams, automobiles, furniture, clothing, appliances, and utilities. Students themselves produce products using methods that simulate those used in a factory or on a site. Many of the student activities are planned for small groups in which each student plays a unique role or performs a specialized task . . . as would occur in the real world of industry. This program is offered in all the junior high schools. Program coordinators report improvement in reading and math skills as well as a decrease in discipline problems (App. 4). At present the program includes male students only. It is recommended that the schools open this program to include female students. Unfortunately there is no continuation of this program into the senior high schools.

Aside from the Industrial Arts Curriculum Project, all five junior high schools offer mechanical drawing, one offers graphic arts, and one offers an electricity course in Spanish as well as in English.

General shop (wood, plastics, metal, leather), mechanical drawing, and general metals are offered in all eight senior high schools. Graphic arts is offered in two high schools, and machine shop is offered in one high school.

Home Economics is viewed as an essential part of the total

educational program since it focuses all of its teachings on the family and the home. In the elementary (5th and 6th) grades general homemaking is offered. At the junior high school level the curricula offered are foods, nutrition, clothing and textiles, and family living. Important aspects of education in this area are to develop in the student a thorough knowledge of the relationship of food and nutrition to the health and well being of the individual as well as teaching basic skills in food preparations, meal planning, and wise food purchasing.

The clothing and textiles unit attempts to give the student competency in purchasing of supplies, use of the sewing machine as well as the development of safe work habits.

The senior high schools offer: foods, nutrition, clothing and textiles, and housing and home management.

The special schools offer a mixture of both Industrial Arts and Home Economics and include "sheltered workshops".

The Newark School System has approximately 600 students working part time under Cooperative Education work-study programs. The number of students being exposed to the world of work by means of these programs could be increased if two conditions were met. First, the Board of Education would have to add more teacher-coordinators to its staff since by law coordinators are limited to 15-20 students each and

Secondly, business and industry could help the school people by informing them of any jobs that could be filled by work-study people.

ESSEX COUNTY VOCATIONAL TECHNICAL SCHOOLS

The Essex County Vocational and Technical schools are public schools which are free to residents of Essex County. Evening and apprentice classes are free to those residing or working in Essex County. Out-of-county residents are charged a tuition fee to cover approximately the net cost of instruction to the county.

Vocational education in Essex County is primarily education for positions in the skilled trades and technical occupations in industry and commerce. The courses offered at the county schools fall into the following classifications:

Vocational High School
Technical High School
Adult Technical
Apprenticeship
Special Schedules for Special Students
Manpower Development Training

Since this report is limited to on-going career education type offerings, we will concentrate only on the first five programs since the other two are not part of the regular program.

VOCATIONAL HIGH SCHOOL COURSES

These courses are approved by the State Department of Education for high school diploma credit. They are specialized high

school courses which prepare for skilled trade jobs in industry. They include work in English, Social Studies, and Health Education, as well as strictly vocational subjects of shop work, related science, mathematics, and drawing. The courses are three years in length for those who enter after completion of the ninth grade. Those entering after completion of the eighth grade are placed in a specific vocational course. What follows is a listing of the Vocational high school offerings with the total enrollment for specified grades and the number of schools the courses are offered at:

Courses	Grades	Total Enrollment	# Schools Offering Course
Basic Course (Academic)		811	4
Automotive Repair & Service	10-12	173	3
Cabinet Making	10-12	21	1
Carpentry	10-12	102	3
Commercial Art	10-12	73	2
Auto Body & Fender Repair	10-12	36	1
Electrical Construction & Main.	10-12	80	3
Food Services	10-12	59	2
Machine Shop	10-12	94	3
Masonry	10-12	28	1
Printing	10-12	24	1
Sheet Metal Shop	10-12	21	1
Tool & Die Making	10-12	60	3

Courses	Grades	Total Enrollment	# Schools Offering Course
Heating & Refrigeration	10-12	27	1
Beauty Culture	10-12	91	1
Business Practice & Machines	10-12	104	1
Dressmaking	10-12	50	1

TECHNICAL HIGH SCHOOL COURSES

These courses are approved by the State Department of Public Instruction for high school diploma credit. They are specialized high school courses like the skilled trade courses except that (1) they prepare for technical and semi-professional occupations, (2) they offer less shop work and more work in science and mathematics. Although they are not designed to prepare for college, graduates of some courses are accepted by some colleges.

What follows is a listing of Technical High School courses with total enrollment for specified grades (where information was available) and the number of schools the courses are offered at:

Course	Grades	Total Enrollment	# Schools Offering Course
Aeronautics	10-12	29	1
Industrial Lab Techniques	10-12	11	1
Manufacturing Techniques	10-12	19	3
Mechanical Drafting & Design	10-12	71	3
Technical Industrial Electricity	10-12	91	1
Automatic Heating & Air Conditioning	10-12	5	1
Radio & TV Repair	10-12	51	1
Technical Secretary	10-12	81	1
Commercial Art & Design			1
Dressmaking & Design			1

ADULT TECHNICAL COURSES

These courses are designed for those who have completed four years of high school or have had equivalent education or experience that fits them for intensive preparation for a job. These courses offer less instructional preparation in general education than the Vocational and Technical High School courses. They also vary in length from 10 months to 2 years.

The following list details the courses offered under this program with the corresponding enrollment information where available:

Course	Total Enrollment	# Schools Offering Course
Advertising Design	2	2
Automobile Servicing	2	3
Building Construction Trades	2	3
Commercial Art		1
Industrial Electricity		2
Technical Electricity & Electronics		2
Industrial Laboratory Technology		1
Elementary Machine Shop Practice	7	2
Tool and Die Making Practice		2
Mechanical Drafting		2
Elements of Machine Design		2
Mechanical Technology		2
Printing Presswork	4	1
Aircraft Engine Mechanics	13	1
Aircraft Mechanics		1
Radio & TV Electronics	2	1
Radio & TV Service		1
Air Conditioning		1
Electronics		1
Beauty Culture		1
Business Machines	16	1
Cosmetology	58	1
Dental Assistant	46	1

Course	Total Enrollment	# Schools Offering Course
Dietary Assistant		1
Dress Design	3	1
Executive Secretary		1
Food Services		1
Food Management		1
Medical Assistant		1
Practical Nursing	162	1
Technical Secretary		1
Cabinet Making	1	1
Carpentry	6	
Medical Secretary	28	1

EVENING SCHOOL COURSES

These courses are designed for those who are employed during the day and wish to improve and advance in their jobs to a more highly skilled position within their employment field.

Only strictly vocational subjects are offered in these courses. They are composed of many short units of instruction that can be selected as desired to meet the immediate or long-term needs of those employed during the day.

The courses offered under this program with their total enrollment

(where available) are:

Course	Total Enrollment
Offset Press	10
Air Conditioning	35
Automotive Mechanics & Repair	154
Automotive Body & Fender Service	72
Blueprint Reading	18
Business Arithmetic & Bookkeeping	48
Bricklaying	17
Business English	
Cabinet Making	24
Business Machines	56
Carpentry	93
Dictation & Transcription	
Dental Materials	
Diesel Mechanics	13
Electric Arc Welding	17
T.I.G. Welding	89
R.S.E.S. Electrical	31
Electricity	187
High School Equivalency	86
Inspection Practices	38
Keypunch	168
Machine Shop	13

Course	Total Enrollment
Mechanical Drafting	34
Nurse's Aide	34
Oil Burner Installation & Service	19
First Aid and Safety	71
Photography	23
Power Engineering	147
Printing	26
Programming (Cobol)	27
Radio & T.V. Electronics	65
Refrigeration	80
Power Sewing	45
Sheet Metal	16
Stenography	77
Steno Typing	18
Tool & Die Making	73
Typing	168
Waste & Water Operations	18
Construction Layout	10
Instruments	7
Foremanship	17
Mechanical Technology	18
Basic Police Training	38
Instruction Methods	14
Airframe	14

APPRENTICESHIP COURSES

They are cooperative courses. Individuals are employed by industry as apprentices under an agreement to give a specified series of job experiences under the direct supervision of skilled mechanics or technicians. The apprentice is required to attend a county school from four to six hours per week, receiving primarily related technical instruction.

These courses are generally four years in length. Apprentice programs offered by the county schools with total enrollment figures are:

Apprenticeship Course	Total Enrollment
Mechanics	87
Carpentry	13
Drafting	108
Electrical	42
Floor Covering	
Glazing	
Machine	
Masonry-Bricklaying	
Millwright	174
Power Plant Engineering	5
Oil Burner Service	18
Painting	

Apprenticeship Course	Total Enrollment
Pipefitting and steamfitting	81
Plumbing	84
Printing	6
Radio & T.V.	
Refrigeration Service	
Sheet Metal	177
Tool and Die Making	67

Appendix 5 is offered for a comparison of the types of Career Education curriculum offered in other cities throughout the country, specifically Dallas, Texas and Wilmington, Delaware.

SECTION VI

PROGRAM DUPLICATION

This section of the study deals with the topic of Program Duplication existing between the Newark Public Schools and the Essex County Vocational and Technical Schools.

Duplication does exist and this is easily explained by the fact that in the past, there has been very little if any formal communication between the two agencies.

The depth of their relationship can be described as casual encounters at Teachers' Conventions and individual instances of close rapport between some guidance personnel. Understandably, with this kind of relationship, the two agencies are not very familiar with each other's program offerings.

Some degree of duplication is unavoidable since city requirements for a high school diploma specify that all students must have at least one year of practical arts and/or home economics. However, the study team does not feel that the degree of duplication existing between the Newark Public Schools and the County Vocational Schools presents a serious problem.

Another aspect of duplication exists which is perhaps more serious than the one previously discussed. Duplication is permissible when the training provided leads to gainful employment. When this is not the case, and facilities are not used to their maximum, then duplication is a waste of monies and efforts. The county schools appear to have a great deal of

unnecessary duplication. The following information will serve to illustrate this.

Automotive Repair and Service is offered at three of the county schools with a total enrollment of 10th, 11th, and 12th grades of 173 students. The average class size would then be 19. For shop courses, that size class is adequate. However, carpentry is offered at three schools with total enrollment of 10th, 11th, and 12th grades of 102 students. Average class size is 11. Electrical Construction and Maintenance offered at three schools has a total enrollment of 80 for 10th, 11th, and 12th grades. Average class size would be nine students. Manufacturing Techniques offered at three schools has a total enrollment of 10th, 11th, and 12th grades of 19 students. Tool and Diemaking is offered at three schools and has total enrollment for 10th, 11th, and 12th grades of 60 students. Machine shop offered at three county schools has a total enrollment for 10th, 11th, and 12th grades of 94. Total enrollment for Mechanical Drafting and Design offered at three schools for the same grades is 71 students. Commercial Art and Food Services offered at two schools have total enrollments for the same grades of 73 and 59 respectively.

The county school people explain program and facility duplication by claiming that since they are county schools they must serve all of Essex County, i.e., a student from suburban Essex has the right to attend the county school closest to him and that school should offer the course he wants as a vocation. However,

considering the fact that 80% of total student population of the county schools comes from the city of Newark, and in light of the statistics mentioned in the preceding paragraph, it is the opinion of the study team that this extensive amount of duplication is unnecessary.

The study team further feels that the county schools are not operating at capacity. All of the Vocational and Technical High School courses can be labeled undersubscribed with the following exceptions:

Automotive Repair and Service
Radio and T.V.
Beauty Culture
Business Machines
Technical Secretary
Food Services

The validity of offering three year programs in areas such as commercial art and dressmaking is also very questionable, since they are admittedly areas of non-job placement.

The problem of duplication in both the Newark Public Schools and the County Vocational Technical Schools is enlarged by the fact that very little has been done in terms of program updating. This subject will be discussed in the next section of this report.

Possible Alternatives

An attempt must be made by all school people to work from a survey of what job needs are at the present time and what they will be in the near future. From this, it must be determined:

- which curriculum offerings should be updated and kept.
- which should be eliminated.
- which should be instituted.

Closer liaisons with other school systems should be developed so that all may benefit from each other's experiences.

The county school people should re-evaluate their programs to determine the validity of a three-year course of study for some courses such as dressmaking and food services.

The county schools should explore the feasibility of offering short term courses to meet the needs of those students who wish to cross lines of training and also those who transfer into their schools into grades other than 9th and 10th.

It is recommended that the county schools explore the possibility of adding to its curricula a cluster of orientation in the 9th grade with a separate unit within it to improve the reading and computation level of its incoming students.

It is strongly recommended that both school systems actively pursue the issue of transportation so that no student whether from Newark or from its suburbs may be discouraged from attending the county school that offers his choice of vocation.

The county schools this year have been cooperating with Newark Public Schools, specifically with Barringer High School, by making available 30 shared time slots. It is planned that next year the county schools will offer 200 shared time slots.

The study team strongly recommends that this practice of shared time continues and be increased. Through this type of cooperation, greater numbers of Newark Public School students will be exposed to careers while receiving valuable skill training.

At the same time, the county schools will be filling empty slots and making full use of facilities.

It is recommended that the Newark Public Schools expand the career education program at Peshine-Weequahic Schools to all the Newark schools so that all students K-12 may be exposed to careers. This expansion, however, should not take place until the necessary planning required for this task has been completed.

SECTION VII

JOB SURVEY NEEDS
AND
PROGRAM OUTDATEDNESS

In order for vocational programs to be worthwhile, they should be related to the job needs of the city and the surrounding area. There is little point in training students for jobs which do not exist, and are not expected to exist.

At present, planning in the vocational area is fairly haphazard. Course offerings are based primarily on what administrators feel is needed. This feeling, however, is based on little or no objective data regarding job needs and projections.

Some of the teachers in the county schools conduct their own informal surveys in the summer. These provide some limited input. However, these surveys are not systematized nor are they comprehensive. That is, with such an informal system, there is no guarantee of accuracy. They also result in very few changes in the curriculum.

Another basis for the administrators' decisions is student demand. For instance, auto mechanics is a popular course in the county schools. Consequently the system is planning to expand this course and open another auto shop. However, in making this decision, the administrators did not consider the demand for auto mechanics. It may very well be that, with the large number of cars and trucks in this densely populated area, mechanics are needed. The point is that no one really knows. There was no source of information that the schools could refer to for confirmation of their feelings.

So the schools at present have three things on which to base their course changes - feeling of the administrator, informal and necessarily incomplete surveys done by teachers in the summer, and perceived student demand. None of these is an ideal measure on which to base such decisions.

Perhaps as a result of this shortage of information, the schools, especially the county schools, change their offerings very little. For instance, one county high school has the same course offerings now that it had twenty-two years ago. No change has been made - no new courses have been added; no old ones have been dropped. Surely the job needs of today are not the same as those of yesterday, yet the school is run as if they were.

This situation points up the obvious need for a job needs survey with five and ten year projections. Such a survey would provide sound data on which to base curricular changes. It would tell whether or not auto mechanics will be needed when the students graduate and whether they will still have jobs six years later. The question then arises as to who should conduct the needs survey.

Rather than waste efforts and finances investigating the methodology for such a task, it is the recommendation of the study team that Newark examine the format followed by Dade County, Florida. An occupational needs survey was conducted there using the resources of: The State Employment Security Agency and the Manpower Area Planning Council for Dade County.

For more detailed information about this survey see Appendix 25.

The study team sees the involvement of at least two agencies in conducting a needs survey for the Newark area. These are: The State Employment Service and the Chamber of Commerce.

The study team feels that Essex County College has taken an important first step in this direction. The college is currently conducting a needs survey of the new Newark Airport complex and has expressed a desire to cooperate with the career education agencies by offering whatever information is uncovered.

To maximize the use of the job needs survey, a few more steps need to be taken. These steps involve students, teachers, school administrators and the business community.

First, students need to be educated about the wide range of careers available to them. Today, most students are familiar with only a few careers - those of their family and the few ever-popular ones like doctor and lawyer. Such information is an integral part of career education. The program from K-6 calls for career awareness. Children who have career awareness as an integral part of their curriculum arrive at high school with a good basis for their decisions regarding future careers. They have broad knowledge about the many careers they have to choose from.

One vehicle for such awareness is the Technology for Children

Program (T4CP). T4CP is now in some classes at the Peshine Avenue School. The children learn by doing in this program. They are exposed to the physical and life sciences. Training for teachers in T4CP is available in Edison, New Jersey from the State. Elementary teachers could be sent from Newark for the three-day workshop. Those teachers that are trained at Edison could then come back and train the remaining Newark teachers. In this manner, T4CP could become a regular part of the curriculum in the 73-74 school year.

Students who will be entering high school in the next three years will not have the background provided by T4CP and elementary career awareness programs. For them, there should be a special program of counseling and teaching to help them decide on their future career plans. These two steps, one permanent, one only temporary, would give students a basis for choice. They would know the different jobs available in any given career cluster. They would know the salary and future that can be expected from a specific job. Such education would insure the development of each person as an individual making an independent, educated choice about his future.

To make the job needs survey more worthwhile, the course content in high schools especially must be kept up to date. That is, the schools must teach the skills and knowledge that are needed by the business community. At present such updating is done on an informal basis.

Most teachers in vocational courses have worked in business and industry in the area they teach. They try to keep up their contacts in industry and so keep their courses up-to-date. Such a method works well as long as the teacher has good contacts and the initiative and desire to make use of them.

One way we see of improving on this informal method is to institutionalize a system similar to one conducted last year in Newark by the National Alliance of Businessmen. Teachers were taken to operating plants and informed about the latest methods and machines in their fields. Since they were already familiar with the basics, the review process was relatively short. Such a program would be conducted annually at little cost to either business or the schools and with benefits to both. The schools gain more knowledgeable teachers, and the business community gains more knowledgeable employees.

It might be mentioned here that Newark needs teachers on all levels who are trained in and attuned to career education. Newark's schools should make this clear to the education departments of schools in the State. Training in career education before the teacher is hired cuts down on the need for in-service training run by public school systems. It makes the teacher more effective in his first years of teaching.

Training in career education would not only be useful to Newark schools but to all schools in the State. Career education is

being promoted throughout the State and is gradually becoming a popular form of education. Therefore, teachers trained in these new techniques would be valuable additions to any system in the State.

SECTION VIII

PERFORMANCE MEASUREMENT:
NEWARK PUBLIC SCHOOLS
ESSEX COUNTY VOCATIONAL-TECHNICAL SCHOOLS

Newark Public Schools

Performance measurement of Career Education related programs was limited to those identified and described in the "Outline of Federal Programs for Education" FY 1972-1973. Although every program listed its goals and objectives, difficulty in measuring the results of educational development and attainment in terms of behavioral objectives in the cognitive, affective, and psychomotor domain was experienced.

The difficulty in measurement can be attributed to several causes:

1. An effective tool to test in these areas was not developed.
2. Changes in administrators of some programs.
3. Goals of the program were employment-related.

The chairman of the Business Education Department at one of the Newark schools was very cooperative in providing to the study team a listed breakdown of participating students that were placed into employment as far back as 1968. (App. 6) Although the number of students placed into employment does not equal program participants, the study team was advised that the students have entered other fields.

This could possibly be the most crucial stage of evaluating the net result of the total educational process affecting students

that are employment bound. At the present time, once the student is graduated and enters the world of work, little success is accomplished in follow-up. The study team proposes utilizing individual Social Security numbers as a means to locate students 1, 2, 5, even 10 years after leaving school.

Since entry into the world of work requires working papers and the assignment of a Social Security Number and these papers are on file in the Board of Education at 31 Green Street, by matching names of graduates and obtaining the Social Security Number this in turn can be fed into the computer in Trenton, New Jersey and a printout of graduates' present employers would be listed. A questionnaire or personal interview could then be arranged to measure the impact of education and special programs in developing career employment skills.

In almost all of the programs that were reviewed, no attempt was made to measure or compare growth in reading comprehension and arithmetic computational skills.

The exception to this (App. 4) is an evaluation of the World of Construction and the World of Manufacturing curriculum at Webster Junior High School, whereby the students were compared over a school year to a pilot control group. The W.O.C. and W.O.M. group improved their attendance and reading scores significantly and disciplinary problems just about disappeared.

Appendix 7 is a follow-up study of Graduating Students of Newark Public High Schools.

In the area of Adult-Basic Education Grades K-8 and High School Equivalency Grade 9-12 the attached statistical reports (App. 8) indicate a 25-30% of students terminated. Terminated is an all-encompassing term that includes people who have completed their requirements, dropped out, left for employment and other reasons. At the completion of the 1971-72 school year, 1,338 students were tested for their high school equivalency certificate, and 85% or 1,137 students, passed the test.

Essex County Vocational-Technical Schools

A review of placements of four vocational schools of the class of 1972 reveals a high ratio of employment to those available for employment with but a minimal number unemployed (App. 9). Whether those employed were in occupations or trades related to their training was not identified as a matter of concern. This placement follow-up task is left up to one individual for the county schools. It is recommended that the county schools augment their placement staff so that this task may be accomplished.

Since "employability" suggests traits other than simply job knowledge and skills, we would recommend that interviews be

conducted with those employers who hired vocational graduates to unearth the basis for the judgement of such employers. Of further interest would be comparing employer assessments of vocational graduates with academic or general graduates. Our problem in obtaining information on performance measurement was complicated by the lack of planned and programmed follow through.

The study team makes these additional recommendations in hopes of strengthening the area of performance measurement.

1. Measurable data such as: reading level, mathematical ability, and absence and tardiness records should accompany each program's evaluation.

2. When a program measurement is unsatisfactory the cause of failure should be determined before elimination of a program.

3. Establish a long range plan to have an outside professional team available to perform evaluations of programs, thereby eliminating self-evaluation.

SECTION IX

THE DROPOUT PROBLEM

Any examination of career education must consider a very significant problem which touches not only career education but all aspects of the educational process - namely the young person, who for a variety of reasons, does not remain in school to complete requirements for a diploma. This problem challenges classroom teachers, administrators, guidance counselors, board of education members, and us as concerned members of the business community.

While the problem is not limited to urban areas such as Newark, it is in the city that the dropout problem is most acute. Specifically, in the past eleven years over 14,000 young people have dropped out of the Newark School System (See Appendix 10). Although the Department of Guidance in the Newark Public Schools has attempted to gather career-related information on these young people, it has met with little success because of difficulty in locating them as well as a lack of cooperation if they are found. Naturally the School System is interested in learning if these people are working and are able to support themselves. However, it is not unreasonable to assume that a large percentage remain totally unemployed or find only limited employment, and instead of becoming productive, self-sustaining members of society many become burdens on society and rely on the government for support. Even worse, some turn to activities which bring them into conflict with the law.

Although demonstrable progress has been made in the dropout rate (from a high of 9% in the 1962-1963 school year to 5.1% in the 1971-1972 school year), the fact remains that in the last school year over 1,000 students dropped out of Newark Schools (see Appendix 10). This fact by itself demands that a directed effort be made to correct the causes of this problem.

While family and social influences are dramatically important on the life of a young person and may to some degree negate the positive effect of the schools, this does not deny the responsibility of the schools to furnish a complete quality education. In fact, it should serve to underscore the importance of the classroom to those who come from a culturally deprived background. This is especially true in the primary school years where success and fun in learning should become the building blocks for future successes.

Any suggestions for decreasing the number of dropouts must affect the early school years as well as the high school years.

ALTERNATIVE SCHOOLS

At present there are several alternative programs in the city which are seeking methods of solving this problem. Following is a brief description of each:

Independence High School

Located in the Ironbound section of Newark and operating out of an old toy factory, Independence High is open primarily to students who have already dropped out of high school. Largely experimental, the school has rejected the organization, curriculum, and methods which the founders feel characterize the standard high school. There is no "administration" and the students have an important say in what is taught. There are few regulations governing behavior and none governing attendance or tardiness.

Since the school is new (started September, 1971) results are difficult to measure. At this writing, firm criteria for graduation had not been established. Yet the school is still feeling its way along, striving to provide an interesting and meaningful curriculum to students who have not survived in the structured high school.

Independence High now has approximately 50 students.

Youth Consultation Service Academy

The Y.C.S. Academy in the North Ward works in association with Barringer High School. It operates basically as a dropout prevention program and seeks young people who show signs of alienation, truancy, underachievement, and in some cases, law breaking. The Academy provides the students with informal

structuring, counseling, and small class size (8 students maximum) which permits personal attention not possible in a large high school. With a staff of six teachers, a psychologist, a social worker, a psychiatric consultant, and a community worker, the Academy feels it can deal with most of the problems the students have. The student who stays in the program until completion graduates with a regular Barringer diploma. This program started in November of 1970 and now has approximately 50 students.

Project Link

In the Central Ward, Project Link is a program for young people primarily of seventh and eighth grade age, although the educational program is essentially ungraded. Many of their students have been chronic discipline problems, underachievers, and truants. Project Link works with small classes and stresses individual attention to students and development of each student's self-image. It has developed an excellent working relationship with the community. Para-professionals from the community are used in the classrooms, and important decisions such as the selection of students to be enrolled and the choice of staff members are actually made by committees of parents. General meetings with parents are held monthly and are well attended. The administrators of the school feel that this direct community involvement has made the school much more effective. The parents know what the school is trying to do and continue the work the school has started at home.

Project Link has an enrollment of about 100 students and started in September 1969.

Education Center for Youth

The Education Center for Youth is intended for students who have completed ninth grade, who have actually dropped out of school, and who wish to re-enter a school program. Although this is the oldest alternative program in the City, it has existed for only nine years. Students attend school for one week and work at jobs supplied by business the following week. Thus, each job accommodates two students who alternate between school and job on a 52 week schedule. The program cooperates closely with five major corporations which not only provide jobs, but offer general advisory support. The program appears to have achieved success in placing these students who have earned a Barringer diploma on completion of the program. Similar programs have been suggested for other areas in Newark.

SUMMARY

Each of these programs is designed for students who have had difficulty in the standard classroom. Because they are all basically new, with the nine year old Education Center for Youth being the oldest, their success is not easy to gauge. Moreover, their efforts to work with the dropout and potential dropout are limited. Taken together they account for no more than 300 students. We feel the Board of Education should fully evaluate these programs, examine their successes, and see what

can be adapted or altered for a special program for potential dropouts. While this is clearly a long range program, there are other recommendations which can start immediately.

RECOMMENDATIONS

Social Security Number

In association with a particular career-oriented program or course, each student would go through the procedure of getting a social security number. This would take place not later than the sixth grade. The social security number would become part of the permanent school record and could be used to determine employment status in later years.

Elementary Counselors

From all the information available it is apparent that the typical dropout begins to have problems in his elementary years. (See Appendix 11). To aid classroom teachers in identifying these problems and developing instructional aids and programs for these students, special elementary school counselors should be appointed.

Retention Counselors

Until recently there had been special "retention" counselors in most of the high schools whose job it was to work with students who were in danger of dropping out. (See Appendix 12).

This program was changed so that each counselor shared responsibility for these students. We feel that this type of work is specialized, and therefore requires the talents of a specialist. We urge that the high schools with the highest dropout rates reinstate the retention counselor. These would include Barringer, Central, Malcolm X Shabazz, Vailsburg, Weequahic, and West Side. In addition, the duties of this special counselor should be re-examined to permit maximum time working with the student who may drop out.

Work Study Programs

Of all the efforts to encourage students to remain in school, nothing seems to be more effective than the existing work study programs. All evidence indicates that when potential dropouts become involved in work-study programs their grades, attendance, and behavior greatly improve. (See Appendix 13). However, there are not enough jobs to accommodate all students who are interested. This appears to be an area in which the Chamber of Commerce can play a most significant role. The Chamber should do everything in its power to find work study jobs for all interested students. This last statement applies also to community agencies, as they are in a position to provide non-paying community service type jobs for interested students.

Open Classrooms

Several locations in Newark are working with open classrooms. While there is no consistent definition of "open classroom",

it is highly unstructured, permits a child to move at his own pace in learning, generally gives him freedom to more physically within the classroom, and emphasizes "hands on" motivation in the learning process. We see these efforts as possibly being a very important step in getting at the root of the dropout problem. Their results should be examined with these questions in mind:

How effective is it?

Is it best for all students or only particular students?

How much does it cost?

These and other questions cannot be answered immediately, but the potential of open classrooms should be totally explored.

CONCLUSIONS

All of these alternatives imply major changes in approach from the traditional high school, and it is not unreasonable to expect a higher than average cost-per-pupil in implementing and maintaining alternative programs. However, weighed against the potential cost to society, the cost for providing an education to a dropout prone individual should justify the added expenditure. We must not lose sight of the fact that the loss of 1,000 persons per year from the complete K through 12 educational process, and from only one city, will thrust into society masses of young people who are not capable, generally speaking, of holding anything but the most menial of jobs. The problems of the cities are sufficiently great without adding this additional burden.

This section of the study has dealt with the dropout problem based on information obtained from the Newark Public Schools. It does not include the county vocational schools as that information was not readily available.

SECTION X

ESSEX COUNTY COMMUNITY COLLEGE AND PROJECT COED: GENERAL BACKGROUND

CONTRIBUTIONS TO CAREER EDUCATION FOR NEWARK

ESSEX COUNTY COLLEGE

Essex County College has taken some major steps since its beginning in 1966 toward Career Education. Originally designed as a career education institute, Essex County College initially prepared its students for jobs in the greater Newark and Essex County areas and only secondly prepared them for transfer to senior colleges.

Essex County College's current budget is $9,925,000 which finances five major Educational Divisions. These divisions are (1) Allied Health Division, with career emphasis ranging from Nursing to Laboratory Technicians to Medical Secretary. (2) Business Division, with career curriculum emphasis in computer processing, secretarial studies, data processing and general office careers. (3) The Natural and Applied science division has two most unique and growing career curriculum in Fire and Safety Science and Law Enforcement. (4) The Humanities Division tends to comprise mostly the liberal arts courses leading to continued education at a four year college, and (5) the Social Science Division, much like that of the Humanities Division leads to degrees necessitating transfer to four year institutions.

The college has a special program leading to a career in Urban Planning. The Urban Studies program prepares its graduates to approach the problem of Urban Development from an analytical

viewpoint as well as a construction problem solving viewpoint in welfare rights, health planning and community organization.

On the drawing board for the future is an aviation careers curriculum to be done in connection with the airlines located at Newark's International Airport. This curriculum will provide paper certification where necessary for upward mobility.

The extent of program duplication is rather small, especially at this level of training. For instance, in the business area, the State University has no undergraduate degree program on its Newark Campus.

With the college's policy of open enrollment and its special programs such as DEEP, the school's facilities are much too small. However, there is a massive building program going on at the present time, therefore, the existing facilities will lose some of their crowded conditions.

Each educational division has an advisor and an advisory committee (App. 14). However, the only concrete performance measurement that was available was the percentage of graduates and transfers to four year colleges and those who were employed after completing courses (App. 15).

The study team recommends that the college explore the feasibility of establishing programs for senior high school students

similar to the work-study format. In work-study programs, students attend school in the morning and are employed in actual work sites in the afternoon. What the study team recommends for the college is a program whereby seniors would attend their respective high schools for half a day and attend the college (with college credits being awarded) for the other half of the day.

CENTER FOR OCCUPATIONAL EDUCATION, EXPERIMENTATION AND DEMONSTRATION (Project COED)

The Center for Occupational Education, Experimentation, and Demonstration (Project COED) of the Division of Vocational Education of the New Jersey Department of Education is a new program which will be housed in a new facility now being built which will physically connect to the Newark Manpower Training Skills Center at 167 Broadway.

Since the building itself is still under construction there is no way to evaluate the program so this report by necessity will be limited.

Plans call for the building to be completed in March, 1974 with a possibility that some training will begin on a pilot basis at that time. Full scheduling will begin in September, 1974.

Currently, funding will be done entirely by the New Jersey Department of Education. Project COED, the first of its kind in New Jersey will be run in cooperation with the Newark Board of Education.

Basically, the program involves potential school drop-outs who would continue classes on a part time basis at their regular Newark schools while spending the rest of the school day at Project COED undergoing vocational training in one of some 14 planned occupational areas. They continue to be at all times Newark Board of Education students and would receive the normal diploma from their particular high school.

Current estimates call for an operating budget of between $1.5 - 2.0 million per year and a staff of slightly over 100. It is expected there will be a 50-50 male-female student breakdown with a total enrollment of 800. There will be no grade structure at the center. There will be evening classes and possibly summer programs.

Roughly 100 adults will attend the center due to a requirement of EDA which made the original construction grant. Admission to the program is being based on a minimum age of 14, and not on grade level. Students, of course, will be selected by the Newark Board of Education.

An Advisory Committee was established when the center was first

being planned to assist in the development of the project. Now, a Steering Committee is being proposed which will act as a quasi Board of Directors.

The 14 career areas, which will be taught in a cluster method, are:

Auto Body Reconditioning
Food Services
Personal Services
Building Service-Maintenance
Data Processing
Marketing Merchandising Management
Drafting and Design
Electro-Mechanical Equipment Services
Electricity and Electronics
Environmental Systems Control
Hydraulic and Pneumatic Systems
Health Occupations
Office Occupations
Visual Communications

Appendix 16 is the booklet prepared by the State Department of Education and the Newark Board of Education, desc bing Project COED.

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